

mately protects the building from mold, water, frost, snow, and wind.

Siding comes in a variety of forms, including wood, fiber-cement, metal, and the commonly used vinyl siding, with all of its variations. Manufacturers across the United States compete to fulfill the needs of owners and property managers by offering siding with integral characteristics and modern flair. The premium-product end of the siding spectrum usually involves the special treatments and manufacturing methods that are applied to the various siding materials.

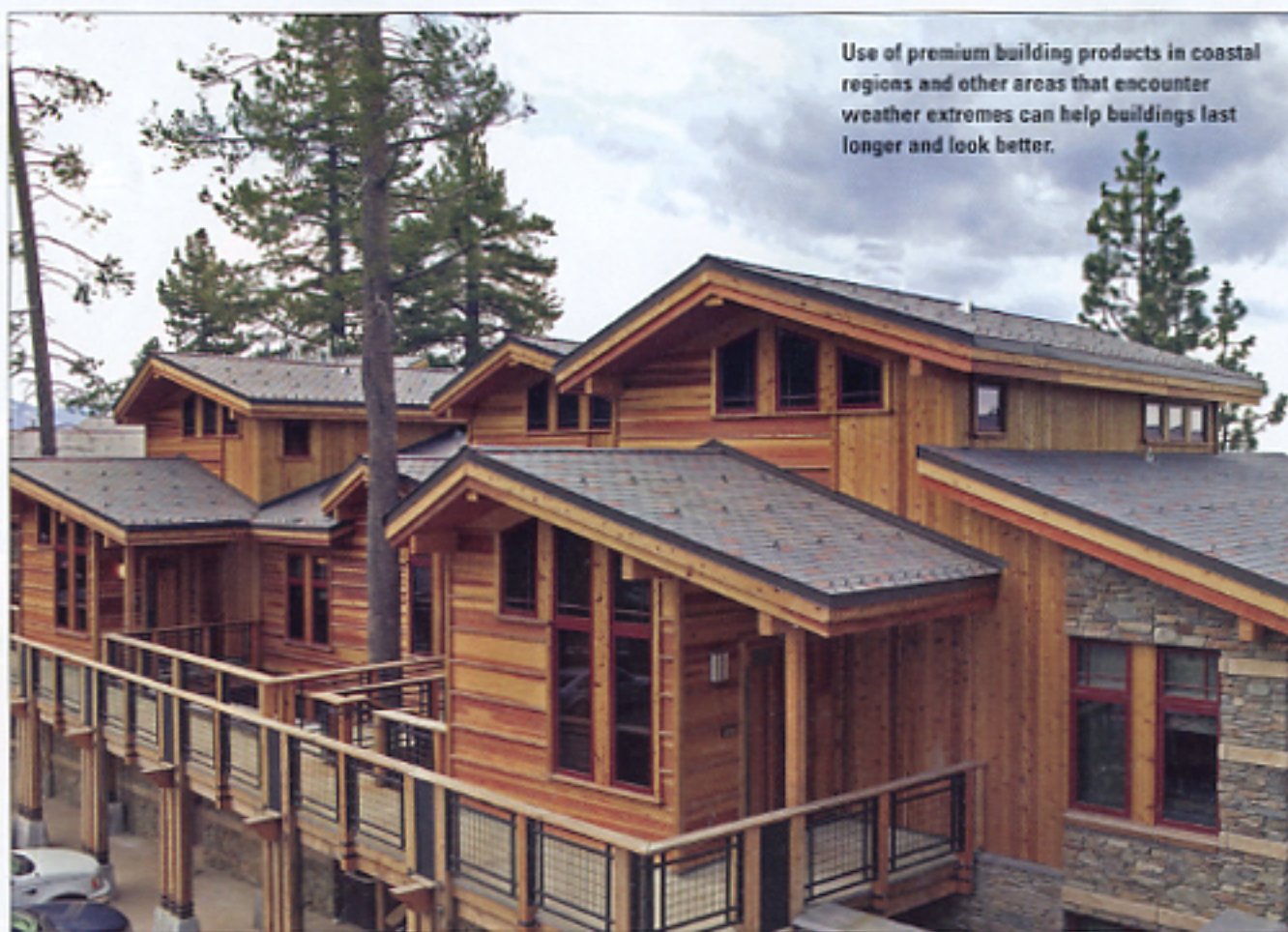
For example, C.M. Tucker Lumber Corp., Pageland, SC, manufacturer of LifePine siding products, offers a natural-wood alternative that cannot be achieved with synthetic siding. Its line of siding products is manufactured using southern yellow pine, which is ideal for condominiums since it can be used throughout the country, including coastal regions. It is also a low-maintenance product. Unlike cedar, pine is stronger and durable enough to withstand disaster-prone areas. "Our products are supported with 30- and 50-yr. warranties, so there is no worry about product failure," said Sherrill Green, marketing director of LifePine.

In addition to its integrity, the product is treated with a preservative that prevents fungus and moss from flourishing on siding. Moss and fungus growth can degrade exterior products, causing unwanted maintenance.

Moss and fungus are not nearly as threatening to exterior products as fire. Products that offer fire protection can result in discounted insurance premiums and provide extra assurance for homeowners. LifePine is treated with a non-arsenic preservative that provides 100% saturation, providing better protection than can be found in conventional wood siding materials.

Another example of premium siding products are the fiber-cement materials, which provide a long-term warranty and low-maintenance qualities. James Hardie Siding Products, Mission Viejo, CA, manufactures Hardiplank fiber-cement siding that looks similar to wood and resists rotting and cracking.

Comprised of Portland cement, finely ground sand, and natural fibers, the



Use of premium building products in coastal regions and other areas that encounter weather extremes can help buildings last longer and look better.

siding offers excellent fire, wind, termite, and moisture resistance. Styles include a smooth finish, a wood grain texture, and a rough-sawn look. Owners can paint the siding without the worry of shrinking or swelling. Paint is said to last three to four times longer than on conventional siding.

For siding that doesn't require paint, Nichiha USA, Atlanta, offers fiber cement siding profiles that have the appearance of stone, brick, or shake. These products are attached directly to the wood or metal framing of a building and require no specialized labor to install. There are no exposed fasteners, leaving a clean, classic look.

The low-maintenance siding products adapt to walls that are not completely straight and can be easily cut using a standard carbide-tip saw blade.

Wrapping material

Protecting a multifamily or condominium building with house wrap might not be as simple as you think. The variations of house wrap products,

such as perforated, non-perforated, woven, and non-woven, all aim to fulfill the same goal—to maximize the effectiveness of insulation within the wall cavity by protecting it from air and moisture infiltration.

According to research done by Bruce Mann & Associates LLC, Midlothian, VA, house wrap reduces leakage of outside air through the wall assembly from 40% to 93% and a draft as light as 10 mph can decrease the effective "R" value of insulation by 63% in an unwrapped structure.

Two elements that must be present in an effective wrapping material are resistance to air infiltration and resistance to moisture infiltration and permeability, the property that allows moisture vapor to escape. Without the delicate balance between the two, it's a recipe for disaster. An optimum perm value between 5 and 15 is high enough to allow water vapor to escape from behind the house wrap in cool weather while reducing the water vapor that can move into the wall in warm weather. High perm values are only desirable when it is cold outside and warm inside. Exactly the opposite is true some of the time in northern climates and much of the time in southern climates. Very high perm values allow water vapor to easily pass through the house wrap in both directions.

Though wraps should not completely "seal" a building, since buildings need to breathe, finding a balance between breathability and permeability is essential. Manufacturers are continually improving and adding features to

their wraps to ensure this balance is achievable.

In terms of premium building products, Pactiv Corp., Atlanta, offers this balance with its four GreenGuard building wraps, each with different characteristics beyond the normal functionality of house wraps. The newest product, RainDrop, offers built-in drainage channels that help channel water that penetrates the exterior veneer. This product works particularly well when the exterior cladding is vinyl, fiber cement, wood, or any other cladding that is tightly attached to the wall. The channels do not crush when the siding is secured, ensuring space for water to drain and space for air movement behind the siding.

A newcomer to the building wrap industry, CS Fabric International Corp., Lawrence, NY, produces Prime Wrap. It is a woven and coated polyethylene fabric with small pinholes throughout the fabric to allow passage of water vapor. Prime Wrap has a water vapor permeance rating of between 5 and 15 under ASTM E-96-A testing.

From color and composition, to durability and maintainability, exterior components offer the best of both worlds, functionality and aesthetics. Today's plethora of premium exterior building products is not the least bit predictable. To partake in this era's expressive exteriors, don't settle for the norm, but find products that will best fit your exterior's needs. ▀

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